

Please replace the paragraph beginning at page 16, line 12, with the following replacement paragraph:

AS --Subsequently, when the vertical scan pulse  $\Phi V_m$  is shifted to "H" level, the selection MOS transistor 53 of the unit pixel 51 of m-th line is turned on. When the reset pulse  $\Phi R_n$  is set to "H" level in this state, the reset MOS transistor 62 is turned on, and the vertical signal line 55 of n-th column is reset to the reference potential  $V_b$  of the column amplifier 59. Thereafter, when the reset pulse  $\Phi R_n$  is shifted to "L" level and at the same time the horizontal scan pulse  $\Phi H_n$  is set to "H" level, the horizontal selection MOS transistor 60 is turned on, and the noise component is first output to the horizontal signal line 58 (period b).--

### IN THE CLAIMS

Please amend claims 1, 3, 11, 14, 15, 16, and 17 as follows:

Sub B1  
Al 1. (Amended) A solid-state image pickup device, comprising:  
a pixel portion having unit pixels arranged two-dimensionally in a matrix form, each of said unit pixels including a photoelectrically transducing element for photoelectrically transducing incident light to obtain a signal charge, and stocking the signal charge thus obtained, a selection switch for selecting one of the pixels, and a read-out switch for reading out the signal charge from said photoelectrically transducing element to one of a plurality of vertical signal lines;  
a plurality of amplifying means, at least one of the amplifying means being connected to each of said respective vertical signal lines and for converting the signal charge read out to the vertical signal lines to an electrical signal; and  
a plurality of reset means for resetting each of said vertical signal lines;  
wherein each of said selection switch and said read-out switch comprises a MOS transistor having a double gate structure.

Sub C1  
A1 3. (Amended) The solid-state image pickup device as claimed in claim 1, wherein each of said reset means resets the respective vertical signal line in synchronism with a read-out timing before one pixel is read or a horizontal scan timing begins.

AB Sub C 11. (Amended) The solid-state image pickup device as claimed in claim 1, wherein a horizontal selection switch for commonly outputting a reset level on said vertical signal line at a reset time of said reset means and a signal level read out onto said vertical signal line after the reset is provided between said vertical signal line and a horizontal signal line.

Sub B2 AA Cond 14. (Amended) A method of driving a solid-state image pickup device comprising a pixel portion having unit pixels arranged two-dimensionally in a matrix form, each of said unit pixels including a photoelectrically transducing element for photoelectrically transducing incident light to obtain a signal charge and stocking the signal charge thus obtained, a selection switch for selecting one of the pixels, and a read-out switch for reading out the signal charge from said photoelectrically transducing element to one of a plurality of vertical signal lines; a plurality of amplifying means at least one of which are connected to each of said respective vertical signal lines and for converting the signal charge read out to the vertical signal lines to an electrical signal, and a plurality of reset means for resetting each of said vertical signal lines, the method comprising the steps of:

resetting the vertical signal line;

after resetting the vertical signal line, reading out a pixel signal from said photoelectrically transducing element to the vertical signal line to successively output a reset level and a signal level in this order through the same route; and

after reading out the pixel signal, calculating a difference between the reset level and the signal level, wherein each of said selection switch and said read-out switch comprises a MOS transistor having a double gate structure.

Sub C 15. (Amended) The solid-state image pickup device driving method as claimed in claim 14, wherein the solid-state image pickup device comprises a plurality of vertical selection lines, and wherein neighboring vertical selection lines are simultaneously driven two by two in turn, and signal charges of two pixels in a vertical direction are mixed with each other on the vertical signal line.

Sub B3  
16. (Amended) A camera comprising:

an optical system for focusing incident light from a subject onto a solid-state image pickup device;

a driving system for driving said solid-state image pickup device; and

Ag Cancel  
a signal processing system for processing an output signal of said solid-state image pickup device, wherein said solid-state image pickup device comprises a pixel portion having unit pixels arranged two-dimensionally in a matrix form, each of said unit pixels including a photoelectrically transducing element for photoelectrically transducing incident light to obtain signal charge, and stocking the signal charge thus obtained, a selection switch for selecting one of the pixels, and a read-out switch for reading out the signal charge from said photoelectrically transducing element to one of a plurality of vertical signal lines, a plurality of means, at least one of which are connected to each of said respective vertical signal lines and for converting the signal charge read out to the vertical signal lines to an electrical signal, and a plurality of reset means for resetting each of said vertical signal lines, and wherein said driving system drives said solid-state image pickup device so that one of the vertical signal lines is first reset and then a pixel signal is read out from said photoelectrically transducing element to the vertical signal line to successively output a reset level and a signal level in this order through the same route, and thereafter calculates a difference between the reset level and the signal level, and wherein each of said selection switch and said read-out switch comprises a MOS transistor having a double gate structure.

Sub C1  
17. (Amended) The camera as claimed in claim 16, wherein the solid-state image pickup device comprises a plurality of vertical selection lines, and wherein neighboring vertical selection lines of said solid-state image pickup device are simultaneously driven two by two in turn, and signal charges of two pixels in a vertical direction are mixed with each other on the vertical signal line to perform an interlace-supporting feedback read-out operation

Please cancel claim 17